

Remarks

Claim 1 was rejected under 35 USC 103(a) as being unpatentable over Schlei et al in view of Anderson et al. The following will show that claim 1 patentably distinguishes the invention over this reference.

Schlei et al is directed to a method and an arrangement for pressure-tight attaching a tubular piece to a connecting part wherein the axial force is determined which occurs at the connecting part. It is this axial force which is used as a switch-off criterion for the clamping operation. A predetermined limit value such as a maximum axial force is provided as the switch-off criterion.

In contrast to Schlei et al, it is not the axial force which is detected in the applicant's method but the radial clamping force as set forth in applicant's claim 1 with the clause:

"detecting the radial clamping force developed during the clamping operation between said clamping ring and said tubular piece;" (emphasis added)

In addition, a force/displacement curve is measured during the clamping operation and a characteristic feature thereof is used as a basis for a criterion for switching off the application of the clamping force. These features are also set forth in claim 1 and are recited in the clauses:

"observing and measuring a force/displacement curve during said clamping operation; and,

utilizing a characteristic feature of

said force/displacement curve as a basis for a criterion for switching off the application of said clamping force."

These measurement quantities of radial force and displacement are shown in the measuring curve of FIG. 1 of the applicant's drawings.

In view of the above, it can be seen that an entirely different force is determined and evaluated. Schlei et al provide no suggestion as to the determination of this clamping force, let alone, for measuring a force/displacement curve during the clamping operation and utilizing a characteristic feature thereof as a criterion for switching off the application of the clamping force. Accordingly, there is no suggestion in Schlei et al which would enable our person of ordinary skill to hit upon the idea of utilizing a radial clamping force in combination with a measured force/displacement curve as set forth in applicant's claim 1.

Anderson et al is directed to a crimping tool which is very different from a tool having clamping jaws for applying a clamping force to a clamping ring for attaching a tubular member made of elastic material. The crimping force is really a pinching operation as can best be seen by referring to FIG. 1 of this reference which shows the two jaws 20 and 42. Crimping tools are used, for example, to attach terminals to wire ends and joining wires using deformable connectors. The crimping tool is therefore far afield from a method for force-tightly attaching a tubular piece made of elastomeric material to a connecting part. Accordingly, it is not seen how our person of ordinary skill would be encouraged to attempt to supplement the teaching of

Schlei et al with the teaching of Anderson et al.

For the reasons advanced above, applicant respectfully submits that claim 1 patentably distinguishes his invention over the combination of Schlei et al and Anderson et al so that this claim should now be allowable. The remaining claims 2 to 8 are dependent from claim 1 so that they too should now be allowable.

Reconsideration of the application is earnestly solicited.

Respectfully submitted,



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Date: December 29, 2003